

REMARKS

I. Claim Rejections – 35 U.S.C. § 102

Prima Facie Anticipation Under 35 U.S.C. § 102

A general definition of *prima facie* unpatentability under 35 U.S.C. § 102 is provided at 37 C.F.R. §1.56(b)(2)(ii):

A *prima facie* case of unpatentability is established when the information *compels a conclusion* that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability. (*emphasis added*)

"Anticipation requires the disclosure in a single prior art reference of each element of the claim under consideration." *W.L. Gore & Associates v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303, 313 (Fed. Cir. 1983) (citing *Soundscriber Corp. v. United States*, 360 F.2d 954, 960, 148 USPQ 298, 301 (Ct. Cl.), *adopted*, 149 USPQ 640 (Ct. Cl. 1966)), *cert. denied*, 469 U.S. 851 (1984). Thus, to anticipate the Applicants' claims, the reference(s) cited by the Examiner must disclose each element recited therein. "There must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention." *Scripps Clinic & Research Foundation v. Genentech, Inc.*, 927 F.2d 1565, 18 USPQ 2d 1001, 1010 (Fed. Cir. 1991).

To overcome the anticipation rejection, the Applicants need only demonstrate that not all elements of a *prima facie* case of anticipation have been met, *i. e.*, show that the reference cited by the Examiner fails to disclose every element in each of the Applicants' claims. "If the examination at the initial state does not produce a *prima facie* case of unpatentability, then without more the Applicant is entitled to grant of the patent." *In re Oetiker*, 977 F.2d 1443, 24 USPQ 2d 1443, 1444 (Fed. Cir. 1992).

Wong et al.

Claims 1, 4-9, 10 and 13-19 stand rejected under 35 U.S.C. 102(b) as being anticipated by Wong et al. (US patent 6,931,387 B1), hereinafter "Wong". The Examiner has offered no arguments regarding claims 5, 7, 14, or 16 in this section. Therefore, the Applicant assumes these listings were merely typographical mistakes.

With regard to claims 1 and 10, the Examiner argued Wong discloses a method and system comprising: accessing an electronic portal that collects and provides ergonomic tool data to a user of said portal, and compiling ergonomic data based on physical input provided by the user to said electronic portal in order to generate ergonomic tool data to the user based on physical input. The Examiner further argued Wong discloses a method and system for associating a search engine with said electronic portal, wherein said search engine is accessible by said user through said electronic portal to automatically identify tool data that are potentially ergonomically appropriate for said user based on said ergonomic data compiled based on physical input provided by the user (citing Abstract; Col. 4, line 60 – Col. 5, line 7; and Col. 6, line 57 – Col. 7, line 45). The Examiner concluded Wong allows the user to physically input information. This information is collected, compared, and product tool recommendations are made available to the user based on input.

The Applicant respectfully disagrees with this assessment. First, the Wong reference fails to discuss a portal that collects or provides tool data. For example, the material cited by the Examiner (Col. 6, line 57 – Col. 7, line 45 of Wong) is simply a discussion of the general collection of data. The Wong reference never discusses the collection of ergonomic tool data. Instead, the collection of data is characterized as a checklist designed to identify various ergonomic hazards and risks typical of a given workplace. This has absolutely no relation to the collection of ergonomic data regarding a specific tool, as is claimed by Applicant's invention. In other words, the collection of ergonomic tool data is not taught by the Wong reference

because that invention (i.e., Wong) does not relate to the collection of tool data.

Further, none of the material cited by the Examiner discloses the generation of ergonomic tool data. The Wong reference generally discloses several parts; an issue component for identifying issues to be resolved, an inquiry component for facilitating collection of client information, a knowledge base, and a solution base (see Wong at Col. 3, lines 40-55). Notice that none of these components disclose generation of ergonomic tool data. By contrast, claim 1 specifically discloses a method intended to provide ergonomic tool data. The two inventions differ in that the reference is intended to acquire data. The present invention goes a step further using collected data, based on physical input, to generate ergonomic tool data.

Wong also fails to disclose compiling data based on a user's physical input. The Examiner's conclusion that Wong allows physical input lacks any reference because such features are not present in the Wong reference. Physical input as described in Applicant's invention refers to the compilation of data based on the actual physical movements of the user as the user moves the tool in question. There is absolutely no teaching in the Wong reference of the compilation of data based on physical movement of a tool. By contrast, the material cited by the Examiner discusses the collection of data through a survey style checklist. This is simply not the same as compiling data based on a user's physical input as described by the present invention. The Applicant has amended claims 1, 10, and 20 in order to more clearly explain this feature.

In light of these arguments, the Applicant respectfully requests the Examiner withdraw the rejections of claims 1 and 10 based on 35 U.S.C. § 102.

Regarding claims 4 and 13 the Examiner argued Wong discloses a method and system as in claim 1 and further generating specific ergonomic data in response to compiling ergonomic data based on physical input provided by the user to the electronic portal in order to generate ergonomic tool data to the user based on physical input (citing Abstract; Col. 4, line 60

- Col. 5, line 7; and Col. 6, line 57 – Col. 7, line 45). The Examiner concluded Wong allows the user to physically input information. This information is collected, compared, and product tool recommendations are made available to the user based on input.

The Applicant respectfully disagrees with this assessment. The Applicant notes that the arguments above for claims 1 and 10 equally apply to the rejection of claims 4 and 13. The Applicant stresses however that the language cited by the Examiner (Col. 6, line 57 – Col. 7, line 45 of Wong) discusses collecting data, but does not disclose generating tool data based on physical input from a user. The Applicant respectfully submits the difference between collecting and generating data is a significant difference between the reference and the present invention. The data generated in the present invention is dependent on and reflective of the tool, the user, and their interaction. Based on the analysis above, Wong fails to disclose each and every element of Applicant's rejected claims 4 and 13.

In light of these arguments, the Applicant respectfully requests the Examiner withdraw the rejections of claims 4 and 13 based on 35 U.S.C. § 102.

Regarding claims 6 and 15 the Examiner argued Wong discloses the limitations of claims 4 and 13 and further discloses analyzing and comparing said specific ergonomic data to data maintained within a database to thereby provide particular tool data matching said specific ergonomic data associated with said user allowing said user to select an appropriate tool (citing Abstract and Col. 11, lines 28-45).

The Applicant respectfully disagrees with this assessment. First, the arguments made above regarding the rejection to claims 4 and 13 equally apply to claims 6 and 15. In addition, Col. 11, lines 28-45 make absolutely no mention of analyzing and comparing specific ergonomic data to data maintained in a database. The material cited actually describes that "from the summary of data provided . . . detailed assessments and recommendations can be provided" (Col. 11, lines 32-33). The cited material fails to discuss all the limitations of claims 6 and 15. For example, there is

no discussion of data to data comparisons in the cited material, there is no discussion of providing particular tool data, or of matching of tool data with ergonomic data associated with said user.

Further, the abstract describing comparison of a new issue with an old issue does not disclose the limitations of claims 6 and 15. As the wording of the claims explains, the art being taught is the comparison of tool data with ergonomic data associated with a user. Fundamentally, this means the comparisons being made in the two inventions are different. Comparison of a new issue with an old issue suggests the purpose of comparison is to identify differences in the issues. By contrast, in the present invention comparisons of tool and user data is intended as a fitting process for a tool to a user. As such, the fact that a comparison of data is made in both inventions does not mean the Wong reference discloses the limitations described in claims 6 and 15.

In light of these arguments, the Applicant respectfully requests the Examiner withdraw the rejections of claims 6 and 15 based on 35 U.S.C. § 102.

Regarding claims 8 and 18, the Examiner argued Wong discloses the limitations of claims 7 and 16 and further discloses a) a high risk factor, wherein ergonomic injury is likely to said user b) a medium risk factor, wherein on a short term basis, a substantial risk to said user is unlikely to occur c) a limited risk factor, wherein said user faces a highly unlikely risk of injury (citing Col. 2, lines 60-67) d) the plurality of risk factors being graphically represented for the user on a display screen as a graphical representation of the human body (citing Col. 11, lines 12-31; Col. 15, line 58 – Col. 16, line 2).

The Applicant respectfully disagrees with this assessment. The Examiner has failed to offer any explanation or reference to the material in the Wong reference that teaches a high risk factor, a medium risk factor, or a limited risk factor. These limitations are specifically enumerated in the claim and therefore must be disclosed by the reference. The material cited by the Examiner (Col. 2, lines 60-67) offers only a discussion of the increasing

likelihood of workplace injuries. This in no way discloses the limitations of the present invention wherein risk factors, listed in claims 8 and 18, are reported to the user of the invention.

In addition, Col. 11, lines 12-31 and Col. 15, line 58 – Col. 16, line 2 do not disclose a plurality of risk factors being graphically represented for the user on a display screen as a graphical representation of the human body. Col. 11, lines 12-31 offers none of the teachings described by claims 8 and 18. Instead, the cited material discusses the ability of the Wong invention to produce summaries and recommendations. There is absolutely no discussion of graphical representations in any capacity. Further, Col. 15, line 58 – Col. 16, line 2 discusses a method for automating the processing of videotapes so that job analysis can be automated. This is completely unrelated to representing risk factors graphically on a representation of a human body. The fact that the reference uses a “mannequin” does not mean the limitation of the present invention has been taught because the mannequin is used for an entirely different purpose, having nothing to do with representations of risk factors.

The Applicant respectfully reminds the Examiner that each and every limitation of the claims in question must be taught by the reference. That is, there must be no difference between the claimed invention and the reference disclosure in order to establish *prima facie* anticipation. In light of the above arguments the Applicant respectfully requests the rejections of claims 8 and 18 be withdrawn.

Regarding claims 9 and 19, the Examiner argued Wong discloses the method and system in claims 1 and 10 wherein said electronic portal is a web portal allowing said user of said web portal to funnel said ergonomic tool data to an online marketplace offering said user a plurality of tool options based on said ergonomic tool data (citing Col. 15, lines 58-63 and Col. 7, lines 37-40). The Examiner concluded analysis can be compiled and compared over the internet and can be returned in recommendations of products “tools” based on information.

The Applicant respectfully disagrees with this assessment. Once again, the Applicant believes the Examiner has taken the reference out of context in order to try to show anticipation of the present invention.

Col. 15, lines 58-63 describe analysis automation. The reference goes on to describe on such application wherein the internet is used as an ergonomic facilitator. This has absolutely no relation to using a web portal to funnel ergonomic tool data to an online marketplace. The internet is used for many applications. The fact that two inventions use the internet to achieve different ends does not mean that one anticipates the other. Col. 7, lines 37-40 also fails to disclose the limitations of claims 9 and 19. The referenced material discusses how an artificial intelligence engine can produce recommendations. This offers no disclosure of funneling ergonomic data to an online marketplace. The Examiner's conclusion that analysis can be compiled and compared over the internet and can be returned in recommendation of products may be true as a general statement, but is not disclosed by the Wong reference. As such, the Applicant respectfully requests the rejection of claims 9 and 19, based on 35 U.S.C. § 102 be withdrawn.

II. Claim Rejections – 35 U.S.C. § 103

Requirements for Prima Facie Obviousness

The obligation of the examiner to go forward and produce reasoning and evidence in support of obviousness is clearly defined at M.P.E.P. §2142:

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

M.P.E.P. §2143 sets out the three basic criteria that a patent examiner must satisfy to establish a *prima facie* case of obviousness:

1. some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings;

2. a reasonable expectation of success; and

3. the teaching or suggestion of all the claim limitations by the prior art reference (or references when combined).

It follows that in the absence of such a *prima facie* showing of obviousness by the Examiner (assuming there are no objections or other grounds for rejection), an applicant is entitled to grant of a patent. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443 (Fed. Cir. 1992). Thus, in order to support an obviousness rejection, the Examiner is obliged to produce evidence compelling a conclusion that each of the three aforementioned basic criteria has been met.

Wong et al.

Claims 7 and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wong et al. (US patent 6,931,387 B1), hereinafter "Wong".

Regarding claims 7 and 16, the Examiner argued Wong discloses a method and system as in claim 1 and further discloses generating a plurality of risk factors for the user based on a cross reference analysis of ergonomic data compiled based on physical input provided by said user to said electronic portal in order to generate ergonomic tool data to said user based on physical input (citing Col. 11, lines 13-31).

The Examiner admitted that Wong does not disclose a known physical profile of the user. The Examiner thus argued it would have been within the ordinary capabilities of one skilled in the art to include a physical profile alongside the physical task profile of Wong (citing Col. 9, lines 39-50) because the physical profile would be interrelated with the effect of the task preformed by the specific user.

The Applicant respectfully disagrees with this assessment. The Examiner has argued Col. 11, lines 13-31 disclose all the following

limitations: generating a plurality of risk factors, cross reference analysis of ergonomic data, based on physical input provided by a user, generating ergonomic tool data for said user. However, the cited material fails to teach or suggest a generating plurality of risk factors. The Wong reference only discusses classifying jobs into risk categories. The cited material fails to teach or suggest cross reference analysis in any capacity. This limitation simply is not taught or suggested by Wong. The material cited by the Examiner fails to teach or suggest actual physical input from the user. There is no indication in the cited material, that the input provided be physical. Rather the Wong reference describes embodiments using a checklist style survey. Thus, all these limitations are not taught by the Wong reference.

Additionally, in order to establish prima facie obviousness all the limitations of the claim must be taught or suggested by the prior art reference. The Examiner has admitted this is not the case for claims 7 and 16 by stating "Wong does not disclose a known physical profile of the user." The fact that Wong fails to teach this limitation is not surprising because Wong also fails to teach or suggest cross reference analysis. Thus, there is no reason to include a known physical profile of a user in the Wong invention. Consequently, all the limitations of claims 7 and 16 are not taught or suggested by the Wong reference. The Examiner has failed to establish prima facie obviousness. The Applicant therefore respectfully requests the rejection of claims 7 and 16 based on 35 U.S.C. § 103 be withdrawn.

Wong et al. in view of Burdea et al.

Claims 2, 3, 5, 11, 12, 14, and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wong et al. (US patent 6,931,387 B1), hereinafter "Wong" in view of Burdea et al. (US patent 5,429,140), hereinafter "Burdea".

Regarding claims 2 and 11, the Examiner argued Wong discloses a method and system as in claims 1 and 10. The Examiner admitted Wong does not disclose a) generating an interactive graphic displayed in three

spatial dimensions for display on a screen for the user b) prompting the user to interact with said interactive graphic display, displayed in three spatial dimensions and utilizing a user input device c) collecting ergonomic data from said user based on input provided by the user through said user input device in association with said interactive graphic display, displayed in three spatial dimensions on said display screen for the user.

The Examiner argued Burdea discloses a virtual reality interactive system that utilizes an input to collect ergonomic data (citing Abstract and Col. 4, lines 4-42 of Burdea). The Examiner concluded it would therefore have been obvious to one of ordinary skill in the art at the time of the art to add the interactive graphic display of Burdea to Wong. The Examiner argued one would have been motivated to add the interactive graphic because it adds clarity to instructions so now the instructions can be relayed verbally or visually.

The Applicant respectfully disagrees with this assessment. The Examiner has noted three specific limitations of claims 2 and 11 not taught by Wong. The First is generating an interactive graphic displayed in three spatial dimensions for display on a screen for the user. The cited language in Burdea offers no more teaching of these specific limitations than Wong. That is, there is absolutely no mention in the cited material of a graphic display or the use of three dimensional technologies. Thus, it is impossible that Burdea teaches or suggests this limitation.

The second is prompting the user to interact with this display. In light of the fact that Burdea fails to teach such a display in the first place it is impossible that Burdea teaches or suggests prompting a user to interact with such a display. Further, even if that were not the case, Burdea still fails to suggest or even hint that the user is prompted to interact with a display.

The third limitation is collecting ergonomic data based on the input device associated with said display. The Applicant agrees Burdea suggests data acquisition but does not teach or suggest using an interactive three dimensional graphic display to accomplish data acquisition. As such, none of

the three limitations the Examiner has noted Wong fails to teach or suggest are within the teaching of Burdea.

The Examiner respectfully reminds the Examiner under the holding in *KSR Int'l. Co. v. Teleflex Inc.*, it is the Examiner's responsibility to explicitly state a rationale to support the legal conclusion of obviousness. This includes an explicit explanation of the apparent reason to combine the elements and "the background knowledge possessed by a person having ordinary skill in the art." (*KSR*, 550 U.S. at 15). Wong and Burdea are not related art. Wong is described as an invention for "facilitating resolution of engineering and business issues" (see abstract of Wong), whereas Burdea is a force feedback rehabilitation system. Thus, one skilled in the art related to Wong would not possess the same level of knowledge and skill in the art related to Burdea. Thus, even pretending Burdea taught the limitations Wong fails to teach, the combination of such inventions still would not be obvious to one skilled in either the art of Wong or Burdea.

In light of the above arguments the Applicant respectfully requests the rejection of claims 2 and 11 based on 35 U.S.C. § 103 be withdrawn.

Regarding claims 3 and 12, the Examiner argued that Wong and Burdea together teach a method and system as taught by Applicant's claims 2 and 11 and that further, such references disclose a user input device that comprises a motion detector configured with a plurality of pressure and weight sensors (citing Col.4, lines 4-42 (without reference to Wong or Burdea)).

The Applicant respectfully disagrees with this assessment. Assuming the Examiner is referencing Burdea, the cited material fails to mention a motion detector or pressure and weight sensors in any capacity. Indeed, the only discussion in the Burdea reference of measuring devices is the need to measure force. As the Examiner is well aware, there are many different methods of measuring force. The unique combination of a motion detector and pressure and weight sensors is not taught or suggested by the Burdea reference in any capacity. The Applicant respectfully reminds the Examiner that each and every claim limitation must be taught or suggested in order to

establish *prima facie* obviousness. The fact that the Burdea reference actually references a different glove device without description of that glove's workings further suggests that Burdea fails to teach or suggest the specific combination of sensors described by claims 3 and 12.

Based on the foregoing the Applicant respectfully requests the rejection of claims 3 and 12 based on 35 U.S.C. § 103 be withdrawn.

Regarding claims 5 and 14, the Examiner argued Wong discloses the limitations of claims 4 and 13. The Examiner admitted Wong does not disclose specific ergonomic data comprising a plurality of output variables representative of weight, twist, grab, pull, push, and motor skills of the user.

The Examiner argued that Burdea discloses a virtual reality interactive system that utilizes an input to collect ergonomic tool data (citing Col. 4, lines 15-30 of Burdea). The Examiner thus argued that it would have been obvious to one skilled in the art at the time of the art to add the interactive graphic to measure the outputs in Wong as taught by Burdea. The Examiner asserted that one would have been motivated to measure the outputs to collect detailed data to provide efficient and accurate recommendations.

While the Applicant agrees that Burdea discloses a system that utilizes input to collect data, the Applicant respectfully disagrees that the purpose of the Burdea invention is to collect ergonomic tool data. The Burdea reference clearly states that it is intended as a medical rehabilitation apparatus. This has nothing to do with assessing the ergonomics of tools. In fact, the Burdea invention is primarily used to simulate holding an object to foster rehabilitation. By contrast, Applicant's claimed invention requires the use of a physical object in order to identify ergonomic risk.

The Applicant also respectfully disagrees that a "virtual reality interactive system that utilizes an input to collect ergonomic tool data" teaches or suggests "specific ergonomic data comprise[d] [of] a plurality of output variables representative of weight, twist, grasp, pull, push and motor skills of said user." The Applicant respectfully reminds the Examiner each and every limitation of the claim in question must be taught or suggested by the reference. This means the Burdea reference must specifically teach or

suggest output variables representative of weight, twist, grasp, pull, push and motor skills of the user. After careful examination of the cited material there is absolutely no mention of these characteristics. Thus, because the Burdea and Wong references fail to teach or suggest all the limitations of claims 5 and 14, the Applicant respectfully requests the rejection of those claims based on 35 U.S.C. § 103 be withdrawn.

Regarding claim 20, the Examiner argued Wong discloses an electronic portal that collects and provides ergonomic tool data to a user of said portal, and compiling ergonomic data based on physical input provided by the user to said electronic portal in order to generate ergonomic tool data to the user based on physical input, an analysis module for analyzing and comparing said specific ergonomic data to data maintained within a database to thereby provide particular tool data matching said specific ergonomic data associated with said user; and generating a module for automatically generating a plurality of risk factors for said user based on a cross reference analysis of ergonomic data compiled in response to physical input provided by said user to said electronic portal via said user input device in order to generate ergonomic tool data based on said physical input (citing Abstract; Col. 4, line 60 – Col. 5, line 7; Col. 6, line 57 – Col. 7, line 45; and Col. 11 lines 13-31 of Wong). The Examiner argued Wong also allows a user to physically input information. This information is collected, compared, and product “tool” recommendations are made available to the user based on input.

The Examiner admitted Wong does not disclose a known physical profile of the user. The Examiner argued it would have been within the ordinary capabilities of one skilled in the art to include a physical profile alongside the physical task profile of Wong (citing Col. 9, lines 39-50) because the physical profile would be interrelated with the effect of the task preformed by the specific user.

The Examiner further admitted Wong does not disclose wherein said electronic portal is displayed graphically in three spatial dimensions on a display screen for the user; a user input device wherein said user is

prompted via said display screen to interact with an interactive graphic display, displayed in three spatial dimensions utilizing said user input device.

The Examiner argued Burdea discloses a virtual reality interactive system that utilizes an input to collect ergonomic data (citing Abstract and Col. 4, lines 4-42 of Burdea). The Examiner concluded it would therefore have been obvious to one of ordinary skill in the art at the time of the art to add the interactive graphic display of Burdea to Wong. The Examiner argued one would have been motivated to add the interactive graphic because it adds clarity to instructions so now the instructions can be relayed verbally or visually.

The Examiner further argued Burdea discloses wherein said specific ergonomic data comprises a plurality of output variables representative of weight twist, grasp, pull, push, and motor skills of said user (citing Col. 4, lines 15-30 of Burdea). The Examiner concluded that it would have been obvious to one skilled in the art at the time of the art to add the interactive graphic to measure the outputs in Wong as taught by Burdea. The Examiner argued one would have been motivated to measure the outputs to collected detailed data to provide efficient and accurate recommendations.

The Applicant respectfully disagrees with this assessment. The Applicant believes the arguments made in favor of independent claims 1 and 10 and the arguments made in favor of the associated independent claims to claims 1 and 10 are equally applicable to the rejections of claim 20. In the interest of brevity those arguments will not be repeated. In light of those arguments, the Applicant respectfully requests the rejection of claim 20 based on 35 U.S.C. § 103 be withdrawn.

III. Conclusion

In view of the foregoing discussion, the Applicant has responded to each and every rejection of the Official Action. The Applicant has clarified the structural distinctions of the present invention. Applicant respectfully requests the withdrawal of the rejections under 35 U.S.C. §102(b) and

§103(a) based on the preceding remarks. Reconsideration and allowance of Applicant's application is also respectfully solicited.

Should there be any outstanding matters that need to be resolved, the Examiner is respectfully requested to contact the undersigned representative to conduct an interview in an effort to expedite prosecution in connection with the present application.

Respectfully submitted,



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